



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent  
appln. of: Ming L. Shiao, et al.

Serial No.: 10/749,680

Filing Date: December 31, 2003

For: **MINERAL-SURFACED ROOFING  
SHINGLES WITH INCREASED  
SOLAR HEAT REFLECTANCE,  
AND PROCESS FOR PRODUCING  
SAME**

Group  
Art Unit:

Examiner: Not yet assigned

Docket No.: 142-03

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Alex R. Sluzas, Reg. No. 28,669

TRANSMITTAL LETTER

Sir:

Enclosed and attached hereto are the following documents for filing in the U.S.

Patent and Trademark Office:

1. This transmittal letter in duplicate;
2. Information Disclosure Statement;
3. PTOL Form 1449, 8 pages;
4. Copies of Cited Prior Art; and
5. Acknowledgment postcard to be date-stamped and returned to Paul & Paul.

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Page 2

The Commissioner is hereby authorized to charge any additional fees associated with this communication, or credit any overpayment, to Paul & Paul Deposit Account No. 16-0750, Order No. 2174.

Respectfully submitted,



Alex R. Sluzas  
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Philadelphia, PA 19103  
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Order No. 2174

March 25, 2004



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Alex R. Sluzas, Reg. No. 28,669

**INFORMATION DISCLOSURE STATEMENT  
PURSUANT TO THE PROVISIONS OF 37 C.F.R. §§ 1.56, 1.97 AND 1.98**

Sir:

In accordance with applicants' duty of disclosure under 35 U.S.C. § 1.56(a) and pursuant to 37 C.F.R. §§ 1.97-1.98, applicants list herewith patents, publications, or other information of which they are aware and they believe may be material to the examination of this application in respect of which there may be a duty to disclose.

The filing of this Information Disclosure Statement shall not be construed to mean that a search has been made, an admission that the information cited is, or is considered to be, material to patentability, or that no other material information, as defined in 37 C.F.R. § 1.56(a),

exists. Further, the filing of this Information Disclosure Statement shall not be construed as an admission against any interest in any manner.

This application is a continuation-in-part of U.S. patent application No. 10/679,898, filed October 6, 2003 to which files the Examiner is referred for copies of the items listed below.

U.S. Patents

U.S. Patent 2,732,311 to Hartwright dated January 24, 1956

U.S. Patent 2,963,378 to Palmquist, et al. dated December 6, 1960

U.S. Patent 2,981,636 to Lodge, et al. dated April 25, 1961

U.S. Patent 3,255,031 to Lodge, et al. dated June 7, 1966

U.S. Patent 4,583,486 to Miller, dated April 22, 1986

U.S. Patent 4,717,614 to Bondoc, et al. dated January 5, 1988

U.S. Patent 4,916,014 to Weber, et al. dated April 10, 1990

U.S. Patent 5,380,552 to George, et al. dated January 10, 1995

U.S. Patent 5,516,573 to George, et al. dated May 14, 1996

U.S. Patent 5,723,516 to Bigham, et al. dated March 3, 1998

U.S. Patent 5,928,761 to Hedblom, et al. dated July 27, 1999

U.S. Patent 5,962,143 to Krauthäuser, et al. dated October 5, 1999

U.S. Patent 6,174,360 to Sliwinski, et al. dated January 16, 2001

U.S. Patent 6,366,397 to Genjima, et al. dated April 2, 2002

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March 25, 2004  
Page 3

U.S. Patent 6,376,075 to Tacke-Willemsen, et al. dated April 23, 2002  
U.S. Patent 6,454,848 to Sliwinski, et al. dated September 24, 2002  
U.S. Patent 6,521,038 to Yanagimoto, et al. dated February 18, 2003  
U.S. Patent 6,533,961 to Harelstad, et al. dated March 18, 2003  
U.S. Patent 6,548,145 to Joedicke dated April 15, 2003  
U.S. Patent 6,569,520 to Jacobs dated May 27, 2003  
U.S. Patent 6,572,784 to Coombs, et al. dated June 3, 2003  
U.S. Patent 6,596,070 to Schmidt, et al. dated July 22, 2003  
U.S. Patent 6,599,355 to Schmidt, et al. dated July 29, 2003  
U.S. Patent 6,607,781 to Joedicke dated August 19, 2003

U.S. Patent Application Publications

U.S. 2002/0160151 to Pinault, et al., Pub. Date: October 31, 2002  
U.S. 2003/0035972 to Hanson, et al., Pub. Date: February 20, 2003  
U.S. 2003/0044525 to Aschenbeck Pub. Date: March 6, 2003  
U.S. 2003/0068469 to Aschenbeck, et al., Pub. Date: April 10, 2003  
U.S. 2003/0091795 to Kiik, et al. Pub. Date: May 15, 2003  
U.S. 2003/0152747 to Fensel, et al. Pub. Date: August 14, 2003

Publications and Other Referenced Documents

Y. Jiang et al., "Novel Pigment Approaches in Optically Variable Security Inks Including Polarizing Cholesteric Liquid Crystal (CLC) Polymers," Optical Security and Counterfeit Deterrence Techniques IV, SPIE 4677, 2002.

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T. A. Germer et al., "Modeling the appearance of special effect pigment coatings," Surface Scattering and Diffraction for Advanced Metrology, Proc. SPIE 4447, 77-86, 2001.

L. Sung et al., "Characterization of Coating Microstructure Using Laser Scanning Confocal Microscopy," undated.

Adobe Systems Incorporated, Technical Guides "Color Models, The CIE Color Models," 2 pgs., 2000.

Adobe Systems Incorporated, Technical Guides "Color Models, The Munsell Color System," 4 pgs., 2000.

Adobe Systems Incorporated, Technical Guides "Color Models, CIELAB," 2 pgs., 2000.

Adobe Systems Incorporated, Technical Guides "Color Models, CIEXYZ," 2 pgs., 2000.

Project Advisory Committee Meeting, "Development of Cool Colored Roofing Materials," Oak Ridge National Laboratory and Livermore Berkeley National Laboratory, 55 pgs., March 11, 2003.

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Gaco Western Inc., "Solar Reflectivity of Common Roofing Materials and GacoFlex Roof Coatings," 2 pgs., undated.

BASF Aktiengesellschaft, "Product Specification, SICOLUX Metal Gloss L 6015," 1 pg., 9/18/02.

BASF Aktiengesellschaft, "Product Specification, SICOLUX Copper Gloss L 3015," 1 pg., 9/18/02.

BASF Corporation, "BASF launches two new pigments for tile coatings" by BASF Corporation, 1 pg. 1998-2003.

Silberline Manufacturing Co., Inc., "StarBrite," 1 pg., 2003.

Serial No. 10/749,680

March 25, 2004

Page 5

In addition to the art cited in the disclosure statement filed in the prior application, the applicants direct the Examiner's attention to the following art, for which copies are enclosed herewith:

U.S. Patents

U.S. Patent 5,194,113 to Lasch, et al. dated March 16, 1993

U.S. Patent 5,310,803 to Hansen dated May 10, 1994

U.S. Patent 5,731,369 to Mahoney dated March 24, 1998

U.S. Patent 6,217,252 to Tolliver, et al. dated April 17, 2001

U.S. Patent 6,451,874 to Purget, et al. dated September 17, 2002

U.S. Patent 6,610,147 to Aschenbeck dated August 26, 2003

U.S. Patent 6,692,824 to Benz, et al. dated February 17, 2004

U.S. Patent Application Publications

U.S. 2002/0092596 to Phillips, et al. Pub. Date: July 18, 2002

U.S. 2003/0091814 to Benz, et al., Pub. Date: May 15, 2003

U.S. 2003/0203145 to Zanchetta, et al., Pub. Date: October 30, 2003

U.S. 2003/0219563 to Zanchetta, et al., Pub. Date: November 27, 2003

U.S. 2004/0009319 to Zanchetta, et al., Pub. Date: January 15, 2004

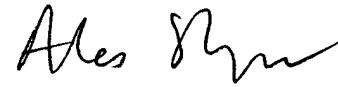
Serial No. 10/749,680

March 25, 2004

Page 6

No additional fee is believed to be required. In the event, the Commissioner is hereby authorized to charge any additional fees associated with this communication, or credit any overpayment, to Paul & Paul Deposit Account No. 16-0750, Order No. 2174.

Respectfully submitted,

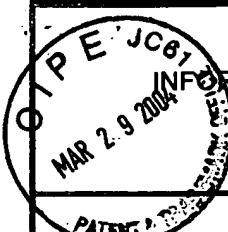


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**INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

ATTY DOCKET NO.

142-03

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Ming L. Shiao, et al.

FILING

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GROUP

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	2,732,311	01/24/56	Hartwright			
	2,963,378	12/06/60	Palmquist, et al.			
	2,981,636	04/25/61	Lodge, et al.			
	3,255,031	06/07/66	Lodge, et al.			
	4,583,486	04/22/86	Miller			
	4,717,614	01/05/88	Bondoc, et al.			
	4,916,014	04/10/90	Weber, et al.			
	5,380,552	01/10/95	George, et al.			
	5,516,573	05/14/96	George, et al.			
	5,723,516	03/03/98	Bigham, et al.			
	5,928,761	07/27/99	Hedblom, et al.			

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

		Y. Jiang, et al., "Novel Pigment Approaches In Optically Variable Security Inks Including Polarizing Cholesteric Liquid Crystal (CLC) Polymers," <u>Optical Security and Counterfeit Deterrence Techniques IV</u> , SPIE 4677, 2002.
		T. A. Germer, et al., "Modeling the appearance of special effect pigment coatings," <u>Surface Scattering and Diffraction for Advanced Metrology</u> , Proc. SPIE 4447, 77-86, 2001.

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	5,962,143	10/05/99	Krauthauser, et al.			
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	6,366,397	04/02/02	Genjima, et al.			
	6,376,075	04/23/02	Tacke-Willemsen, et al.			
	6,454,848	09/24/02	Sliwinski, et al.			
	6,521,038	02/18/03	Yanagimoto, et al.			
	6,533,961	03/18/03	Harelstad, et al.			
	6,548,145	04/15/03	Joedicke			
	6,569,520	05/27/03	Jacobs			
	6,572,784	06/03/03	Coombs, et al.			
	6,596,070	07/22/03	Schmidt, et al.			

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		L. Sung, et al., "Characterization of Coating Microstructure Using Laser Scanning Confocal Microscopy," undated.
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	6,607,781	09/19/03	Joedicke			
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	2003/0035972	02/20/03	Hanson, et al.			
	2003/0044525	03/06/03	Aschenbeck			
	2003/0068469	04/10/03	Aschenbeck, et al.			
	2003/0091795	05/15/03	Kiik, et al.			
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	5,731,369	03/24/98	Mahoney				
	6,217,252	04/17/01	Tolliver, et al.				
	6,451,874	09/17/02	Purget, et al.				
	6,610,147	08/26/03	Aschenbeck				
	6,692,824	02/17/04	Benz, et al.				
	2002/0092596	07/18/02	Phillips, et al.				
	2003/0091814	05/15/03	Benz, et al.				
	2003/0203145	10/30/03	Zanchetta, et al.				
	2003/0219563	11/27/03	Zanchetta, et al.				
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		Adobe Systems Incorporated, Technical Guides "Color Models, CIEXYZ," 2 pgs., 2000.					
		Project Advisory Committee Meeting, "Development of Cool Colored Roofing Materials," Oak Ridge National Laboratory and Livermore Berkeley National Laboratory, 55 pgs., March 11, 2003.					
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